

GOTRAX

F2

ELECTRIC BIKE

USER MANUAL





GOTRAX

Congratulations on your purchase!

This user manual will help you assemble and operate your new electric bike. Be sure to read **ALL OF THE INFORMATION** in this manual before riding.

NOTE TO ALL RIDERS UNDER 18 YEARS OF AGE: It's very important that you get parental permission before riding your electric scooter.

TOOLS INCLUDED: 13&15mm open-end wrench.

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Don't Ride Until You Read This:



ALWAYS wear a helmet when riding your electric bike.



Make sure your electric bike has a **full battery** before taking it out to ride.



Always be aware of local road laws, and follow them.



Do not ride the bike under the influence of drugs or alcohol.



Always respect pedestrians.



Do not ride under wet conditions. The electric bike may slide from under your feet causing injury. Wet conditions may damage the electronics and void the warranty.



To conserve electricity, use assist mode and avoid zero starting, frequent braking, driving against the wind, carrying heavy loads including other people and riding with insufficient air pressure.



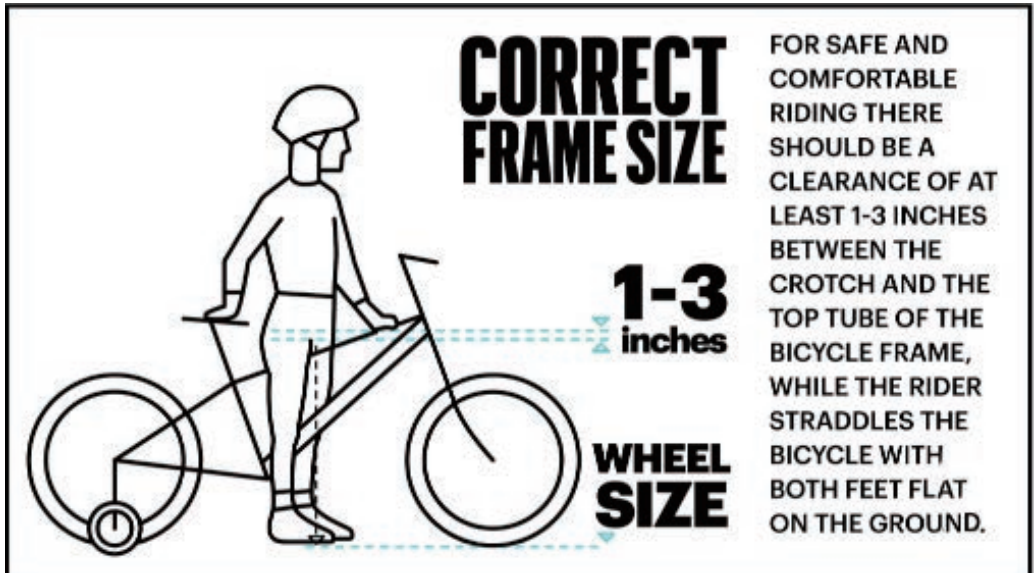
WARNING: This product can expose you to chemicals including Diisononyl phthalate (DINP), which is known to the State of California to cause cancer. For more information go to [www. P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

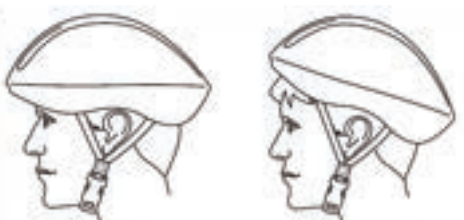


Warning Message

1. **Avoid water** -The electric bike is not waterproof. The electronics may be damaged due to water and water damage is not covered by our warranty. Riding in wet conditions is also very dangerous and may result in injury.
2. **Avoid prolonged exposure** to sun or rain and avoid storage in places with high temperatures or corrosive gas.
3. **Whenever you ride**, you risk severe injury or even death from loss of control, collisions, and falls. Use caution and ride at your own risk.
4. **Do not modify** the product from the manufacturers original design.
5. **Do not exceed** the posted speed limit and obey all traffic laws.
6. **Avoid touching** the charging port directly and do not let it make contact with a metal object.
7. **Keep hands and all body parts away** from moving parts while operating the electric bike.
8. **Before riding** - be sure to check the electric bike over and make sure all components and function are operating correctly before each use.
9. **Before riding** - be sure to check that the braking system is functioning properly; also be sure to check that all safety labels are in place and you understand the safety warnings.
10. **Before riding** - be sure that any and all axle guards, chain guards, or other covers or guards supplied by the manufacturer are in place and in serviceable condition.
11. **Before riding** - be sure to check that the tires are in good condition, inflated properly, and have sufficient tread remaining.
12. **Never exceed** the 264lbs (120 kg) maximum load rating.
13. **The electric bike should never** be used by children under the age of 16.
14. **Maximum Speed** -Your electric bike accelerates to a maximum speed of 20 mph.

15. **Make note that additional insurance may be required** to cover situations you encounter while riding an electric bike. It is recommended that you contact an insurance company or broker for advice and consultation.
16. **To conserve electricity**, use assist mode and avoid zero starting, frequent braking, driving against the wind, carrying heavy loads including other people and riding with insufficient air pressure.





Correct
Forehead covered

Incorrect
Forehead exposed

! ALWAYS WEAR A HELMET IT COULD SAVE YOUR LIFE!

A properly fitting, CPSC approved, bicycle helmet should be worn at all times when riding your bicycle. In addition, if you are carrying a passenger (only use an approved child safety seat), and remember, the passenger must also be wearing a helmet.

The correct helmet should:

- be comfortable
- be lightweight
- have good ventilation
- fit correctly
- cover the forehead
- be securely fastened on the rider.

FCC REGULATIONS This device complies with **Part 15 of the FCC Rules**. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

*Reorient or relocate the receiving antenna.

*Increase the separation between the equipment and receiver.

*Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

*Consult the dealer or an experienced radio/TV technician for help.



Unpacking and Product Specs

Remove all packaging material, then inspect each item for any accidental damage that may have occurred during shipping. You should find each of these items in your box:

1



ELECTRIC BIKE

2



13&15mm OPEN-END WRENCH

3



BATTERY CHARGER

ITEM	SPECIFICATIONS
Model	F2
Unfolded Dimensions	1680 x 680 x 1260 mm (66.1 x 26.7 x 49.6 in)
Folded Dimensions	880 x 610 x 730 mm (34.6 x 24 x 28.7 in)
Package Dimensions	910 x 425 x 745mm (35.8 x 16.7 x 29.3 in)
Max Load	264 lbs (120 kg)
Max Speed	20 mph (32km/h)
Battery	48V 10.4Ah
Battery Specifications	Input 110-240V 50/60Hz AC Plug; Output 54.6V 2A DC 5.5*2.1mm
Pedal-Assist Range	40mile (65km)
Pure Electric Range	22mile (35km)
Max Angle of Climb	14 degrees
Charging Time	5.5hours
Tire Pressure	40-65 PSI
Seat	Adjustable
IP Level	IPx4



Get To Know Your E-Bike



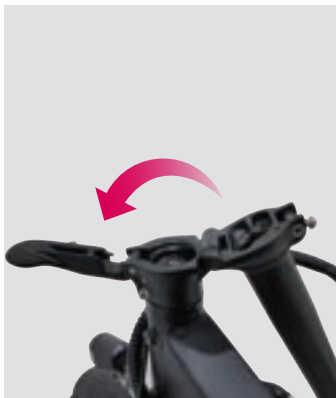
🔧 Handle Bar Installation and Folding



Open the quick release clamp and insert the upper stem and handle bars and lock with the quick release clamp. (This can only be done when the tube is folded.)



Note: The upper stem must be inserted past minimum insertion line.



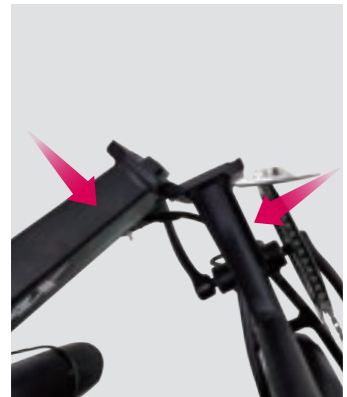
Lift up the stem and lock with the folding clamp.



Note: Make sure that the folding clamp is fastened tightly. (When you press the folding clamp and hear a "click", it is locked in place.)

When you want to open the folding clamp you need to push the safety buckle upwards and pull the folding clamp outwards at the same time to open it .

Body Folding and Unfolding



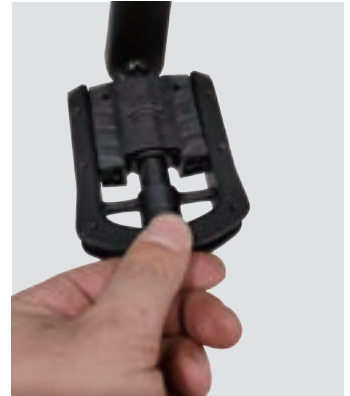
Press the button and pull the folding clamp outward to open it.
Crank angle adjusted to 9 o'clock.



Fold the frame so that the front and rear wheels correspond to complete the fold.

When unfolding, be sure to check whether the folding clamp is tightly fastened in place. When you press the folding clamp and hear a "click", it is locked in place.

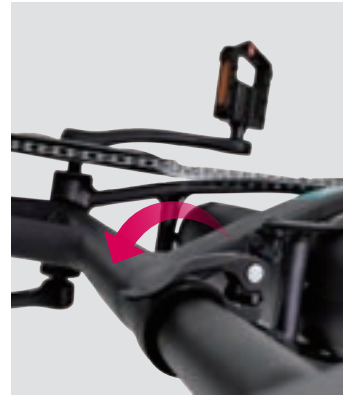
🔧 Pedal Installation and Folding



Prepare the pedal and wrench, and distinguish the left and right pedal according to 'L' and 'R'. 'R' represents the right side, and turn clockwise to lock the right pedal. 'L' represents the left side, and turn counterclockwise to lock the left pedal. The pedal can be folded by pressing inward and lifting up.



✂ Saddle Installation and Adjustment

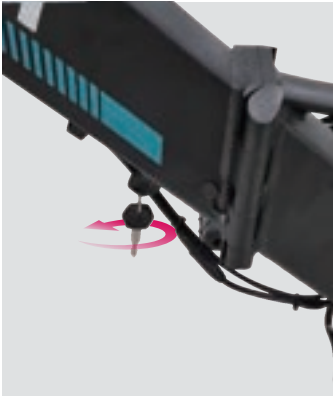


Open the quick release clamp, insert the seat tube, adjust to a suitable height and angle, and lock the quick release clamp. Lock the quick release clamp.



Note: The saddle tube must be inserted to the minimum insertion line.

Removing the Battery



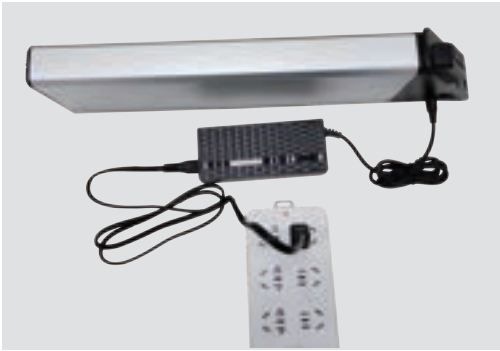
Insert and turn the key counterclockwise to open the battery safety lock and pull out the key. Fold the frame and pull out the battery.

Charge Your E-Bike

You can also charge your battery installed in the bike using the exterior charging port.



✂ Charge Your E-Bike: Method 2



Remove the battery, plug one end of the charger into the battery and the other end into the power supply. Red light shows the battery is charging and the green light means the battery is full.



Tire Inflation Instructions

Tires and Tubes

After assembling your bike, it will be necessary to inflate the tires. Check the sidewall of the tire for the correct tire pressure (PSI) and inflate tires accordingly with a **MANUAL BICYCLE PUMP**. **Improper inflation is the biggest cause of tire failure. Due to the slightly porous nature of bicycle inner tubes, it is normal for your bike tires to lose pressure over time. For this reason it is critically important to maintain the proper tire inflation on your bike.**

1. Your bicycle has been equipped with tires which the bike's manufacturer felt were the best balance of performance and value for the use for which the bike was intended. The tire size and pressure rating are marked on the sidewall of the tire. **CAUTION:** Pencil type automotive tire gauges and gas station air hose pressure settings can be inaccurate and should not be relied upon for consistent, accurate pressure readings. Instead, use a high quality dial gauge.

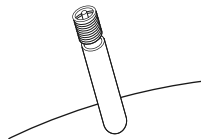


WARNING: NEVER INFLATE A TIRE BEYOND THE MAXIMUM PRESSURE MARKED ON THE TIRE'S SIDEWALL. EXCEEDING THE RECOMMENDED MAXIMUM PRESSURE MAY BLOW THE TIRE OFF THE RIM, WHICH COULD CAUSE DAMAGE TO THE BIKE AND INJURY TO THE RIDER AND OTHERS. THE BEST WAY TO INFLATE A BICYCLE TIRE TO THE CORRECT PRESSURE IS WITH A BICYCLE PUMP. NEVER USE A SERVICE STATION AIR HOSE TO INFLATE A BICYCLE TIRE. IT IS DESIGNED FOR LARGER TIRES AND IT CAN EXCEED THE RECOMMENDED MAXIMUM PRESSURE AND IT MAY BLOW THE TIRE OFF THE RIM.

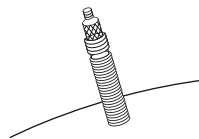
Tire pressure is given either as maximum pressure or as a pressure range. How a tire performs under different terrain or weather conditions depends largely on tire pressure. Inflating the tire to near its maximum recommended pressure gives the lowest rolling resistance; but also produces the harshest ride. High pressures work best on smooth, dry pavement. Very low pressure, at the bottom of the recommended pressure range, gives the best performance on smooth, slick terrain such as hard-packed clay, and on deep, loose surfaces such as deep, dry sand. Tire pressure that is too low for your weight and the riding conditions can cause a puncture of the tube by allowing the tire to deform sufficiently to pinch the inner tube between the rim and the riding surface.

Some special high-performance tires have unidirectional treads: their tread pattern is designed to work better in one direction than in the other. The sidewall marking of a unidirectional tire will have an arrow showing the correct rotation direction. If your bike has unidirectional tires, be sure that they are mounted to rotate in the correct direction.

2. The tire valve allows air to enter the tire's inner tube under pressure, but doesn't let it back out unless you want it to. There are primarily two kinds of bicycle tube valves: The Schraeder Valve and the Presta Valve. The bicycle pump you use must have the fitting appropriate to the valve stems on your bicycle. The Schraeder is like the valve on a car tire, this is the type of valve stem you should have on your bike. To inflate a Schraeder valve tube, remove the valve cap and push the air hose on you bike. To inflate a Presta valve tube, remove the valve cap and push the air hose or pump fitting onto the end of the valve stem. To let air out of a Schraeder valve, depress the pin on the end of the valve stem with the end of a key or other appropriate object.



Schraeder Valve



Presta Valve



Maintenance & Repair

Correct routine maintenance of your new bike will ensure a longer life for your bike and a safer ride for you.

Every time you ride your bike, its condition changes. The more you ride, the more frequently maintenance will be required. We recommend you spend a little time on regular maintenance tasks. The following schedules will assist you in knowing what tasks need to be performed and how often. **If you have any doubts about your abilities to accomplish these tasks, we recommend you take your bike to a professional bicycle mechanic periodically to have them done.**

Schedule1 - Lubrication

Frequency	Component	Lubricant	How to Lubricate
Weekly	chain derailleur wheels derailleurs brake calipers brake levers	chain lube or light oil chain lube or light oil oil oil oil	brush on or squirt brush on or squirt oil can 3 drops from oil can 2 drops from oil can
Monthly	shift levers	lithium based grease	disassemble
Every Six Months	shift levers brake cables	oil lithium based grease	2 drops from oil can disassemble
Yearly	bottom bracket pedals derailleur cables wheel bearings headset seat pillar	lithium based grease lithium based grease lithium based grease lithium based grease lithium based grease lithium based grease	bicycle mechanic disassemble disassemble bicycle mechanic bicycle mechanic disassemble

Note: The frequency of maintenance should increase with use in wet or dusty conditions. Do not over lubricate-remove excess lubricant to prevent dirt build up. Never use a degreaser to lubricate your chain (WD-40™)

Schedule2 - Service Checklist

NOTE: Many instructions for adjustments can be found in the assembly portion of this manual.

Frequency	Task
Before every ride	check wheel and pedal tightness check tire pressure check brake operation check wheels for loose spokes, loose axle nuts or quick release make sure all fasteners are tightened securely
After every ride	quick wipe down with damp cloth
Weekly	lubrication as per schedule 1
Monthly	lubrication as per schedule 1 check derailleur adjustment check brake adjustment check brake and gear cable adjustment check tire wear and pressure check wheels are true and spokes tight check hub, head set and crank bearings for looseness check pedals are tight check handlebars are tight check seat and seat post are tight and comfortably adjusted check frame and fork for trueness

	check all nuts and bolts are tight
Every six months	lubrication as per schedule 1 check all points as per monthly service check and replace brake pads, if required check chain for excess paly or wear
Yearly	lubrication as per schedule 1

NOTE: OWNERS ARE RESPONSIBLE FOR ALL MAINTENANCE AND SERVICE OF THE BICYCLE. FAILURE TO DO SO MAY VOID YOUR WARRANTY, CAUSE DAMAGE TO YOUR BIKE OR ITS COMPONENTS, AND MAY CAUSE AN ACCIDENT.



Function Definition

Power on/off: Press and hold the **M** button for 2 seconds, the display lights up and power on. Press and hold the **M** button for 2 seconds when powered on, the display screen goes out, and the power is turned off. It will automatically shut down after 10 minutes without operation.

Light control: Press and hold the **+** button for 2 seconds to turn on the front and rear lights when powered on. The front and rear lights remain bright and the light icon lights up. When the lights are on, the rear brake light will be brighter than general status. Press and hold the **+** button again for 2 seconds to turn off the lights, and the light icon goes out.

Gears Switching : 0-5 gears in total. Default gear is 0 after switching on, and 0 is neutral, no power output. Short press the **+** button or **-** button to adjust the gear up or down. (**Power assist mode:** 1-5 gears with gear distinction, **electric mode:** 1-5 gears without gear distinction).

Speed switching: After power on, the display shows the real-time speed by default. Short Press the **M** button to switch the display information as follows: SPEED (real-time speed) → AVG (average speed of this ride) → MAX (maximum speed of this ride).

TRIP and ODO Switching: Short press the **M** button to switch the mileage information, which is displayed as follows: TRIP A (single mileage A)→TRIP B(single mileage B)→ODO (Odometer).

Battery Level Display: When the battery is fully charged, the battery will display a full bar, and the display will decrease according to the decrease of the battery. When the battery indicator flashes, it means that the battery is low and needs to be charged in time.

Single-time mileage reset: When the bike is turned on and not running, the display screen displays a single mileage interface. Press and hold the **M** button and **—** button for 2 seconds, and the single-time mileage of the display will be reset to 0.

Power assist mode: Long press the **—** button for 2 seconds, the electric bike will enter the power assist implementation mode (that means depend on the electric to forward) Electric bike travels at a constant speed of 5-6km (3-4mph) per hour, with the icon flashing. Release the button to exit the mode, and the icon goes out at the same time.

Error code: When the electronic control system fails, the display will automatically display ERROR with an error code. Only when the error is eliminated can the error display interface be exited. When the error occurs, the electric bike will not be able to continue driving. Please contact GOTRAX after-sales team for assistance or ask professional maintenance personnel to troubleshoot.

Setting mode: In the power-on but not the running state, press and hold the **+** and **—** buttons for 2 seconds to the setting mode, and switch the setting items by short pressing the **M** button.

Wheel diameter setting: st.1 represents the wheel diameter setting. Because adjusting the wheel diameter will result in inaccurate speed display and mileage display, this setting cannot be adjusted.

Speed limit setting: st.2 means speed limit setting. The factory default value of maximum riding speed is 32KM/h (20MPH). Changing this value can set the maximum riding speed of the electric vehicle. When the riding speed exceeds the set value, the motor will have no power output to protect the safe driving of the rider. The maximum speed setting can be selected from 12km/h to 40km/h, by short pressing the **+** button or **-** button.

The speed limit of pure electric mode is 32Km/h (20MPH), not adjustable, and this setting cannot change the electric mode speed limit value.

Backlight Brightness: st.3 stands for backlight. Parameters 1, 2, and 3 can be set, and the factory default value is 2. The parameters of the backlight brightness can be changed by pressing the **+** button or **-** button. 1 is the darkest, 2 is medium, and 3 is the brightest.

KM/MPH switching: st.4 represents KM/MPH switching. Short press the **+** button or **-** button to switch between KM and MPH.

Exit setting: In the setting mode, press and hold the **M** button for 2 seconds to confirm and save the current setting and exit the current setting.
If no operation is performed within one minute, the meter will automatically exit the setting.



Function Mode

1. **Three Riding Modes:** Electric Assisted Mode, Pedal-Assisted Mode, Bicycle Mode.
2. **Throttle Assisted Mode:** When you turn the bike on, the assist level will be at 0. Press the **+** button to increase auxiliary levels 1-5. Press the throttle to reach the start motor and move the bike. Throttle Assist mode Stages 1-5 assist keep same speed.
3. **Pedal-Assist Mode:** When you turn the bike on, the assist level will be at level 0. Press the **+** key to increase the auxiliary level to 1-5, and press the **-** key to decrease the gearing level.
4. **Bicycle Mode:** When riding in the off state or neutral, the motor has no power output.



Battery Information

Before using the charger locate the voltage selector switch (li-ion chargers only) on the back of the charger. Select either 115 volts or 230 volts depending on your country of residence. Using the wrong voltage setting will permanently damage the charger and/or electrical components on the hybrid electric bicycle.

BATTERY ASSEMBLY

1. Use the matching charger.
2. Insert the round plug into the E-Bike first and then insert the charger plug into the electrical socket.
3. A red light indicates the battery is charging.
4. A green light indicates the battery is fully charged.
5. The Key lock position will vary from model to model.
6. The battery is removable, the battery can be charged attached to the E-Bike or pulled out and charged separately.

CHARGING THE BATTERY

1. When using the charger for the first time, carefully check whether the rated output voltage of the charger is consistent with the battery voltage and check whether the charger input voltage is consistent with the grid voltage.
2. When charging, first put the charger in a ventilated place, then insert the charger output plug into the charging port. Plug the electrical power plug into the 100-240V 50/60Hz AC Power Supply. Be sure to keep the input plug in contact with the AC outlet.
3. After charging, the input plug of the charger shall be pulled out first, and then the output plug connected with E-Bike shall be pulled out. Do not leave the charge plugged in.

PRECAUTIONS FOR BATTERY PROTECTION

1. Do not place anything on the battery and charger when charging, otherwise the charger may overheat and cause serious damage.
2. Only use the charger supplied by the original factory to charge the battery, if you use a different charger your battery will be disqualified from warranty.
3. You can charge your battery at any time if the battery loses power.
4. If you do not use or charge your battery for an extended period of time, battery performance will decrease. If you do not plan to ride your bike for an extended period of time it is recommended to plug in and charge the battery Insert Care/Maintenance section an extended period every 4-6 weeks.
5. Protection can make your battery maintain about 80% of its capacity after more than 500 cycles. But overall decline is inevitable.
6. If the battery remains in a status not charged a long time, it will lead to permanent loss of performance.
7. If you want to store your battery for an extended period, please store and discharge it in a cool and dry place.
8. Keep the temperature between 50-70°F and avoid direct sunlight. Take the battery out for charging every 30 days.
9. Do not intentionally short-circuit the battery which will cause very serious damage and void the warranty.
10. Dispose of your batteries responsibly. Research local recycling regulations.
11. If you have questions about battery use, maintenance, or storage, please contact customer service.
12. Only use the battery supplied with this electronic bike.
13. Never charge a lithium battery unsupervised.



Troubleshooting Guidance

When the E-bike electric control system fails, the display will show the error codes, and only when the fault is removed can you exit the fault display program.

After the fault occurs, the E-bikes will not continue working.

Troubleshooting tips	Code meaning	Troubleshooting clearing
ERROR 22	The accelerator failure	Check the accelerator connection cable. If the connection cable is normal, replace the accelerator
ERROR 23	The motor troubleshooting	Check the motor connection cable. If the connection cable is normal, replace the motor
ERROR 24	The motor troubleshooting	Check the motor connection cable. If the connection cable is normal, replace the motor
ERROR 25	The Brake failure	Check the brake connection cable, if the connection line is normal, replace the brake handle.
ERROR 30	Display communication failure	Check the display connection cable. If the connection cable is normal, replace the display



Warranty

Please contact our customer service team if you are experiencing problems or need more detailed information.

US team after-sales email: **support@gotrax.com**

CA team after-sales email: **canada@gotrax.com**

1. Users should operate in accordance with the product manual. In case of any performance fault caused by production quality, the company shall perform the obligations of the three guarantees in accordance with the provisions of relevant laws and regulations of the state.
2. The company is still responsible for the after-sales service of the faults beyond three guarantees and the major components in the three guarantees, but there will be a cost for repair.
3. If the battery replacement is over the warranty time, our company will supply the battery at factory price. To ensure safety, and avoid pollution.
4. We do not cover physical damage due to negligent care and extreme riding.



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#RideGOTRAX





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